

Consumption. The FAR outcome of Consumption involves the process of incorporating material into an end-item or otherwise consuming it in the performance of a contract. This process directly relates to the requirements of [FAR 31.201-3](#), which addresses overall reasonableness of contractor incurred costs. Within this context, “a cost is reasonable if, in its nature and amount, it does not exceed that which would be incurred by a prudent person in the conduct of competitive business.”

Consumption is driven by the contractor’s environment; i.e., production versus research and development, overhaul and maintenance versus testing. For example:

- In a production environment, consumption rates, including scrap, may be clearly spelled out in the contract or through the contractor’s material requirements lists, bills of materials, scrap rates, and master production schedules.
- In an overhaul and maintenance environment, consumption may be on an “as needed” basis driven by the scope of work specified in the contract and “out of scope” work disclosed after tear down of the reparable.
- In a research and development environment, material requirements may be vague and driven largely by an engineer’s individual program requirements, interim engineering drawings, or testing parameters.

The consumption process generally consists of four elements:

- The first element consists of the issuance of material in reasonable and proper quantities for the work being performed. Issuance can generally be controlled through effective systems that ensure materials are issued only for authorized requirements and only to authorized personnel. Additional factors to be considered by the Property Administrator (PA) are: shelf life; “first in, first out,” processes; lotting; serially numbered items; parts mortality and allowable scrap rates; attrition; and sensitive property.
- The second element consists of the actual incorporation, or expenditure of material into a higher assembly, end item, or through testing. This element includes the attachment or incorporation of consumable material into higher assemblies.
- The third element consists of the return of any unused portions of the material to stock or stores and its annotation on the records or re-establishment of the records with appropriate supporting documentation.

- The fourth element consists of parts or components removed or recovered from repair, rework, testing, or cannibalization. These parts are sometimes returned to stock or stores with the prospect of future use or disposal, dependent upon their condition; e.g., reparable status, shelf life, life expectancy, scrap, or salvage. In some cases, contracts authorize the abandonment of parts to the contractor.

To test for adequacy, the PA shall review the contractor's consumption practices for material through the assessment of material requirements and calculations of the actual consumption of material to ensure that material is consumed in reasonable quantities.

Once released from a stock room or other control activity to the consuming area; i.e., shop floor material is considered "work in process." Work in process (WIP) is defined as material that has been released to manufacturing, engineering, design or other services under the contract and includes undelivered manufactured parts, assemblies, and products, either complete or incomplete.

In general, once released to the consuming area, i.e., "shop floor", contractors may commingle Government-owned, contractor-owned, and work-in-process material without physical segregation or identification to the individual contracts. The extent to which the material is properly managed can be deduced from the consumption analysis, e.g., by comparing the quantities released with quantities consumed, allowing for reasonable scrap and spoilage rates. An excessive or unreasonable quantity of material released from stock for the purpose of avoiding record keeping is indicative of a significant deficiency.

Determining Unreasonable Consumption. As a general rule, material consumption is considered unreasonable if consumption exceeds amounts supported by bills of material, material requirements lists, or similar material planning documents (including reasonable mortality or attrition rates). In an overhaul and maintenance environment, reference should be made to material requirements identified in repair analysis documents. In a research and development environment, PAs may have to seek the assistance of Government technical experts such as quality assurance representatives or engineers.

Remedies for Unreasonable Consumption. Unreasonable consumption of Government materials is not considered a property loss under the risk-of-loss provisions. In cost-type contracts where unreasonable consumption is found, the PA shall recommend the Contracting Officer (CO) consider a cost disallowance action under FAR Part 31 cost principles. In fixed-priced contracts where unreasonable consumption is found, the PA will forward the case to the CO; the

ACO shall determine whether or not consideration should be requested from the contractor. Unreasonable consumption may also be addressed under the Material Management Accounting System, [DFARS 252.242-7004](#).